

Appl. No. 10/605,301

Amdt. dated Aug. 25, 2005

Reply to Office Action mailed June 7, 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A filter aid ~~for use in a filtering system for removing metal particles, tramp oil, and other contaminants from an oil-in-water emulsion produced in a metal working process, the filter aid comprised of~~ comprising:

a cellulosic material; and

a cationic polymer flocculating agent;

the filter aid capable of removing metal particles from an oil-in-water emulsion.

Claim 2 (original): The filter aid set forth in claim 1, wherein the cellulosic material is a powdered cellulose fiber.

Claim 3 (original): The filter aid set forth in claim 1, wherein the cationic polymer flocculating agent is a cationic amine or imine salt polymer.

Claim 4 (currently amended): The filter aid set forth in claim 3, wherein the cationic amine or imine salt polymer is one selected from a group consisting of poly[oxyethylene(dimethylimino)ethylene(dimethylimino)ethylene dichloride poly[oxyethylene(dimethylimino)ethylene(dimethylimino)ethylene dichloride, ~~polydimethylallyl~~ polydimethylallyl ammonium chloride, and tetraalkyl quaternary ammonium chloride.

Claim 5 (currently amended): The filter aid set forth in claim 1, wherein the ratio of cellulosic material to cationic polymer flocculating agent in the filter aid is between approximately 0.5:1 and 30:1.

Claims 6-13 (cancelled)

Claim 14 (new): A filter aid comprising:

a cellulosic material; and

a cationic polymer flocculating agent;

the filter aid capable of removing metal particles from an oil-in-water emulsion while allowing water-soluble organic compounds to pass therethrough.

Claim 15 (new): The filter aid set forth in claim 14, wherein the cellulosic material is a powdered cellulose fiber.

Claim 16 (new): The filter aid set forth in claim 14, wherein the cationic polymer flocculating agent is a cationic amine or imine salt polymer.

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Claim 17 (new): The filter aid set forth in claim 16, wherein the cationic amine or imine salt polymer is one selected from a group consisting of poly[oxyethylene(dimethylimino)ethylene(dimethylimino)ethylene dichloride, polydimethylallyl ammonium chloride, and tetraalkyl quaternary ammonium chloride.

Claim 18 (new): The filter aid set forth in claim 14, wherein the ratio of cellulosic material to cationic polymer flocculating agent in the filter aid is between approximately 0.5:1 and 30:1.

Claim 19 (new): A filter aid comprising:
a cellulosic material; and
a cationic polymer flocculating agent comprised of a cationic amine or imine salt polymer selected from the group consisting of poly(oxyethylene)(dimethylimino)ethylene(dimethylimino)ethylene dichloride and tetraalkyl quaternary ammonium chloride.

Claim 20 (new): The filter aid set forth in claim 19, wherein the cellulosic material is a powdered cellulose fiber.

Claim 21 (new): The filter aid set forth in claim 19, wherein the ratio of cellulosic material to cationic polymer flocculating agent in the filter aid is between approximately 0.5:1 and 30:1.